

Subjective Answer Evaluation using Machine Learning

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Abstract: Subjective questions and answers can assess the performance and ability of a student in an open-ended manner. The answers, naturally, are not bound to any constraint, and students are free to write them according to their mindset and understanding of the concept. This paper proposes a novel approach that utilizes various machine learning, natural language processing techniques, and tools to evaluate descriptive answers automatically. Solution statements and keywords are used to evaluate answers, and a machine learning model is trained to predict the grades of answers. Subjective exams are considered more complex and scarier by both students and teachers due to their one fundamental feature, context. A subjective answer demands the checker check every word of the answer for scoring actively, and the checker's mental health, fatigue, and objectivity play a massive role in the overall result. Therefore, it is much more time and resource-efficient to let a system handle this tedious and somewhat critical task of evaluating subjective answers.

Keywords: Subjective answers.

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